Practitioner's Docket No. VTY2002-01RM

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

STATUS OF THE CLAIMS:

Kindly cancel claims 37-119.

1.   A method for diagnosing or aiding in the diagnosis of a vascular disease or disorder in a subject comprising the steps of determining the THBS2, ACE, and FGB genetic profile of the subject, thereby diagnosing or aiding in the diagnosis of a vascular disease or disorder.

2.   The method of claim 1, wherein determining the subject's THBS2 genetic profile comprises determining the identity of the nucleotide present at nucleotide position 3949 and/or 4476 of SEQ ID NO:1, or the complement thereof.

3.   The method of claim 1, wherein determining the subject's ACE genetic profile comprises determining the identity of the nucleotide present at nucleotide position 86408 of SEQ ID NO:3, or the complement thereof.

4.   The method of claim 1, wherein determining the subject's FGB genetic profile comprises determining the identity of the nucleotide present at nucleotide position 5119 and/or 8059 of SEQ ID NO:5, or the complement thereof.

5.   The method of claim 1, wherein determining the subject's FGB genetic profile comprises determining the identity of the amino acid present at amino acid residue 478 of SEQ ID NO:6.

6.   The method of claim 1, wherein the vascular disease is myocardial infarction.

7.   The method of claim 1, wherein the vascular disease is coronary artery disease.

8.   A method for predicting the likelihood that a subject will or will not develop a vascular disease or disorder comprising the steps of determining the THBS2, ACE, and FGB genetic profile of the subject, thereby predicting the likelihood that a subject will or will not develop a vascular disease or disorder.

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9.   The method of claim 8, wherein determining the subject's THBS2 genetic profile comprises determining the identity of the nucleotide present at nucleotide position 3949 and/or 4476 of SEQ ID NO:1, or the complement thereof.

10.   The method of claim 8, wherein determining the subject's ACE genetic profile comprises determining the identity of the nucleotide present at nucleotide position 86408 of SEQ ID NO:3, or the complement thereof.

11.   The method of claim 8, wherein determining the subject's FGB genetic profile comprises determining the identity of the nucleotide present at nucleotide position 5119 and/or 8059 of SEQ ID NO:5, or the complement thereof.

12.   The method of claim 8, wherein determining the subject's FGB genetic profile comprises determining the identity of the amino acid present at amino acid residue 478 of SEQ ID NO:6.

13.   The method of claim 8, wherein the vascular disease is myocardial infarction.

14.   The method of claim 8, wherein the vascular disease is coronary artery disease.

15.   A method of diagnosing or aiding in the diagnosis of a vascular disease in a subject comprising the steps of determining the nucleotide present at nucleotide position 3949 and/or 4476 of SEQ ID NO:1, wherein the presence of two copies of a cytidine allele at nucleotide position 3949 of SEQ ID NO:1 together with two copies of a thymidine allele at nucleotide position 4476 of SEQ ID NO:1, or the complements thereof, and/or the presence of two copies of a thymidine allele at nucleotide position 3949 of SEQ ID NO:1 together with two copies of a guanine allele at nucleotide position 4476 of SEQ ID NO:1, or the complements thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

16.   The method of claim 15, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

17.   A method of diagnosing or aiding in the diagnosis of a vascular disease in a subject comprising the steps of determining the nucleotide present at nucleotide position 86408 of SEQ ID NO:3, wherein the presence of one copy of an adenine allele and one copy of a guanine allele at nucleotide

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position 3949 of SEQ ID NO:1, or the complement thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

18.   The method of claim 17, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

19.   A method of diagnosing or aiding in the diagnosis of a vascular disease in a subject comprising the steps of determining the nucleotide present at nucleotide position 5119 of SEQ ID NO:5, wherein the presence of two copies of a thymidine allele at position 5119 or the presence of one copy of a thymidine allele and one copy of a cytidine allele at position 5119, or the complements thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

20.   The method of claim 19, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

21.   A method of diagnosing or aiding in the diagnosis of a vascular disease in a subject comprising the steps of determining the nucleotide present at nucleotide position 8059 of SEQ ID NO:5, wherein the presence of two copies of an adenine allele at position 8059 or the presence of one copy of an adenine allele and one copy of a guanine allele at position 8059, or the complements thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

22.   The method of claim 21, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

23.   The method of any one of claims 15, 17, 19, or 21, wherein the vascular disease is selected from the group consisting of atherosclerosis, coronary artery disease, myocardial infarction, ischemia, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism.

24.   The method of claim 23, wherein the vascular disease is myocardial infarction.

25.   The method of claim 23, wherein the vascular disease is coronary artery disease.

26.   A method for predicting the likelihood that a subject will or will not develop a vascular disease, comprising the steps of determining the nucleotide present at nucleotide position 3949 and/or 4476 of SEQ ID NO:1, wherein the presence of two copies of a cytidine allele at nucleotide position 3949 of SEQ ID NO:1 together with two copies of a thymidine allele at nucleotide position 4476 of SEQ ID NO:1, or the complements thereof, and/or the presence of two copies of a thymidine allele at nucleotide position 3949 of SEQ ID NO:1 together with two copies of a guanine allele at nucleotide position 4476 of SEQ ID NO:1, or the complements thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

27.   The method of claim 26, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

28.   A method for predicting the likelihood that a subject will or will not develop a vascular disease, comprising the steps of determining the nucleotide present at nucleotide position 86408 of SEQ ID NO:3, wherein the presence of one copy of an adenine allele and one copy of a guanine allele at nucleotide position 3949 of SEQ ID NO:1, or the complement thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

29.   The method of claim 28, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

30.   A method for predicting the likelihood that a subject will or will not develop a vascular disease, comprising the steps of determining the nucleotide present at nucleotide position 5119 of SEQ ID NO:5, wherein the presence of two copies of a thymidine allele at position 5119 or the presence of one copy of a thymidine allele and one copy of a cytidine allele at position 5119, or the complements thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

31.   The method of claim 30, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

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32.   A method for predicting the likelihood that a subject will or will not develop a vascular disease, comprising the steps of determining the nucleotide present at nucleotide position 8059 of SEQ ID NO:5, wherein the presence of two copies of an adenine allele at position 8059 or the presence of one copy of an adenine allele and one copy of a guanine allele at position 8059, or the complements thereof, is indicative of decreased likelihood of a vascular disease in the subject as compared with a subject having any other combination of these alleles.

33.   The method of claim 32, wherein determining the identity of the nucleotides is by obtaining a nucleic acid sample from the subject.

34.   The method of any one of claims 26, 28, 30, or 32, wherein the vascular disease is selected from the group consisting of atherosclerosis, coronary artery disease, myocardial infarction, ischemia, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism.

35.   The method of claim 34, wherein the vascular disease is myocardial infarction.

36.   The method of claim 34, wherein the vascular disease is coronary artery disease.

37-119.   Cancelled herewith